FIGURE 1

FIGURE 2

300

RECEIVE A
MUSIC PIECE TO
BE CLASSIFIED

302

IS SINGING
VOICE DETECTED
IN THE MUSIC
PIECE?

NO

YES

304

LABEL MUSIC
PIECE AS
INSTRUMENTAL
MUSIC

306

LABEL MUSIC
PIECE AS
SINGING MUSIC

FIGURE 3B
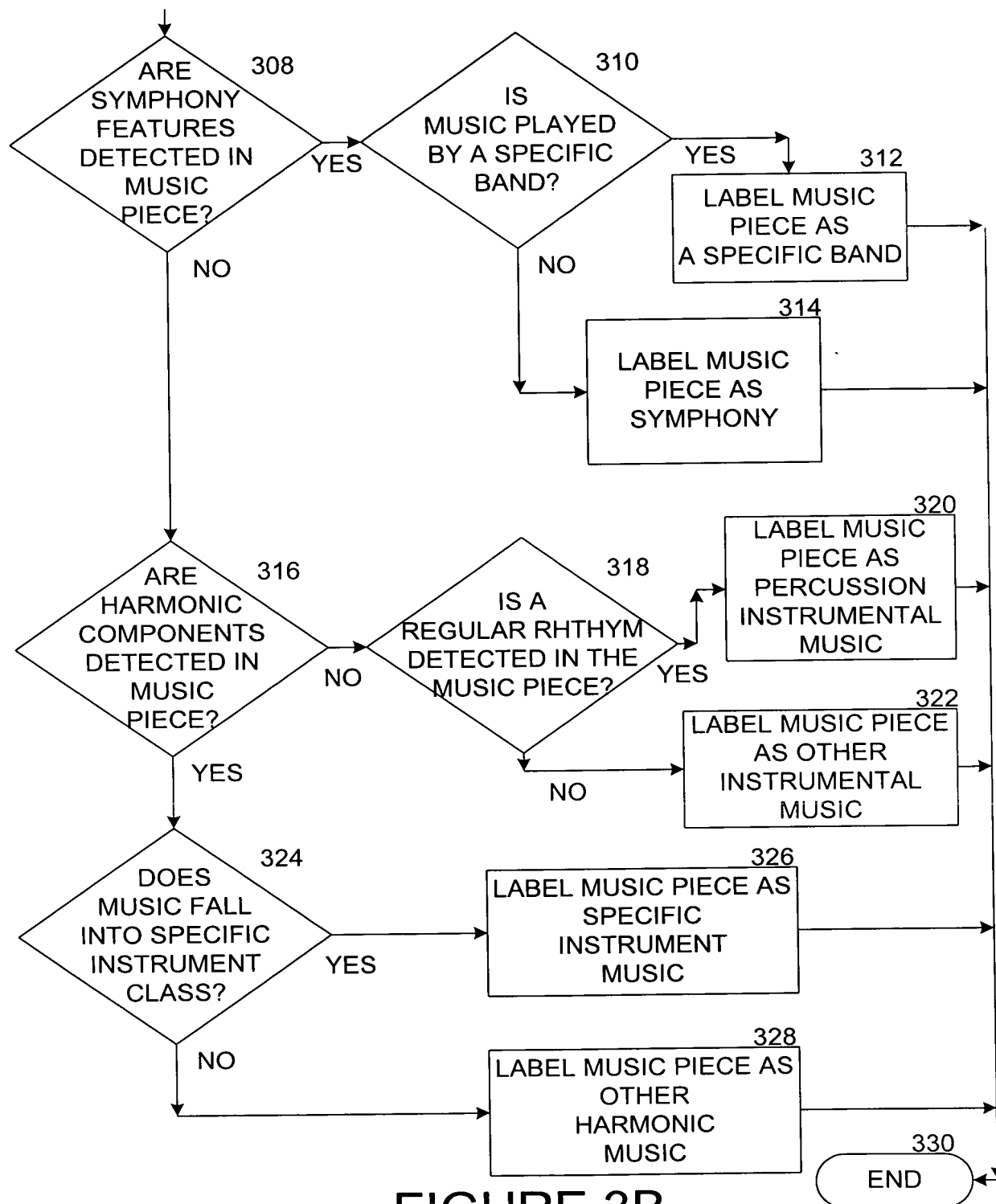
FIGURE 3C
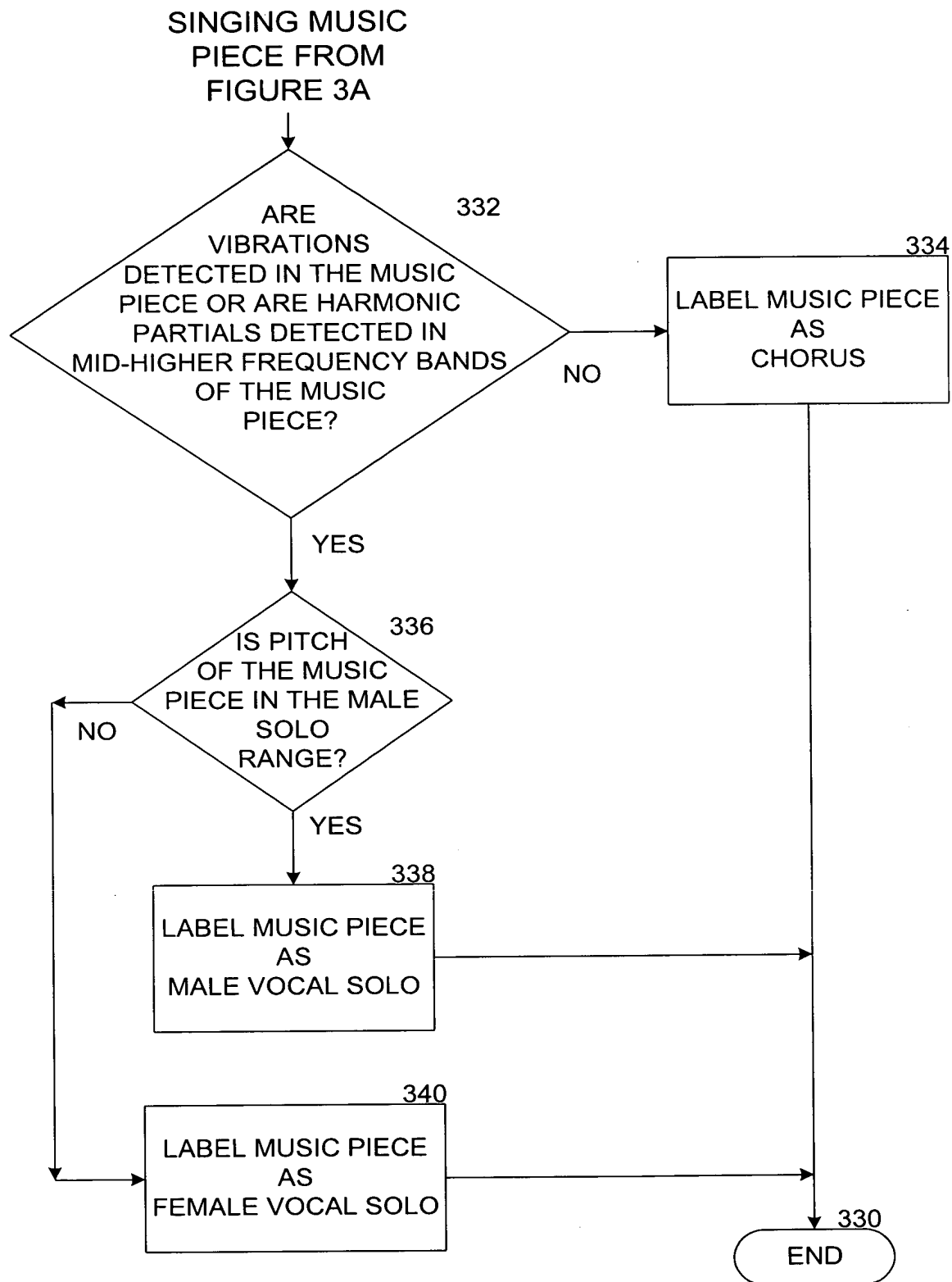
FIGURE 3A

INSTRUMENTAL
MUSIC PIECE
FROM FIGURE 3A

ARE SYMPHONY FEATURES DETECTED IN MUSIC PIECE? 308

YES

IS MUSIC PLAYED BY A SPECIFIC BAND? 310

YES

LABEL MUSIC PIECE AS A SPECIFIC BAND 312

NO

NO

LABEL MUSIC PIECE AS SYMPHONY 314

ARE HARMONIC COMPONENTS DETECTED IN MUSIC PIECE? 316

NO

IS A REGULAR RHTHYM DETECTED IN THE MUSIC PIECE? 318

YES

LABEL MUSIC PIECE AS PERCUSSION INSTRUMENTAL MUSIC 320

NO

LABEL MUSIC PIECE AS OTHER INSTRUMENTAL MUSIC 322

YES

DOES MUSIC FALL INTO SPECIFIC INSTRUMENT CLASS? 324

YES

LABEL MUSIC PIECE AS SPECIFIC INSTRUMENT MUSIC 326

NO

LABEL MUSIC PIECE AS OTHER HARMONIC MUSIC 328

END 330

FIGURE 3B

SINGING MUSIC
PIECE FROM
FIGURE 3A

ARE VIBRATIONS DETECTED IN THE MUSIC PIECE OR ARE HARMONIC PARTIALS DETECTED IN MID-HIGHER FREQUENCY BANDS OF THE MUSIC PIECE? — 332

NO

LABEL MUSIC PIECE AS CHORUS — 334

YES

IS PITCH OF THE MUSIC PIECE IN THE MALE SOLO RANGE? — 336

NO

YES

LABEL MUSIC PIECE AS MALE VOCAL SOLO — 338
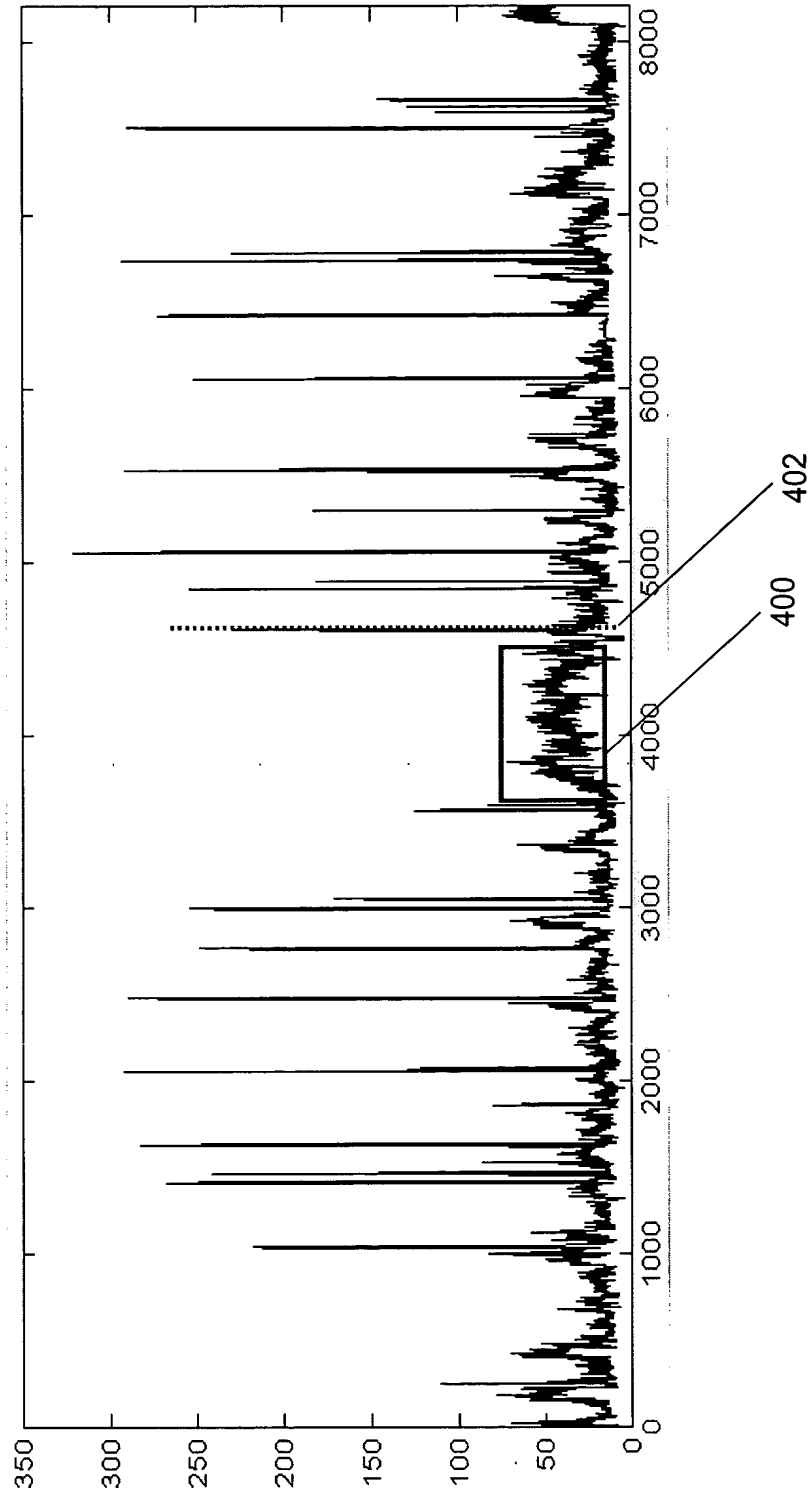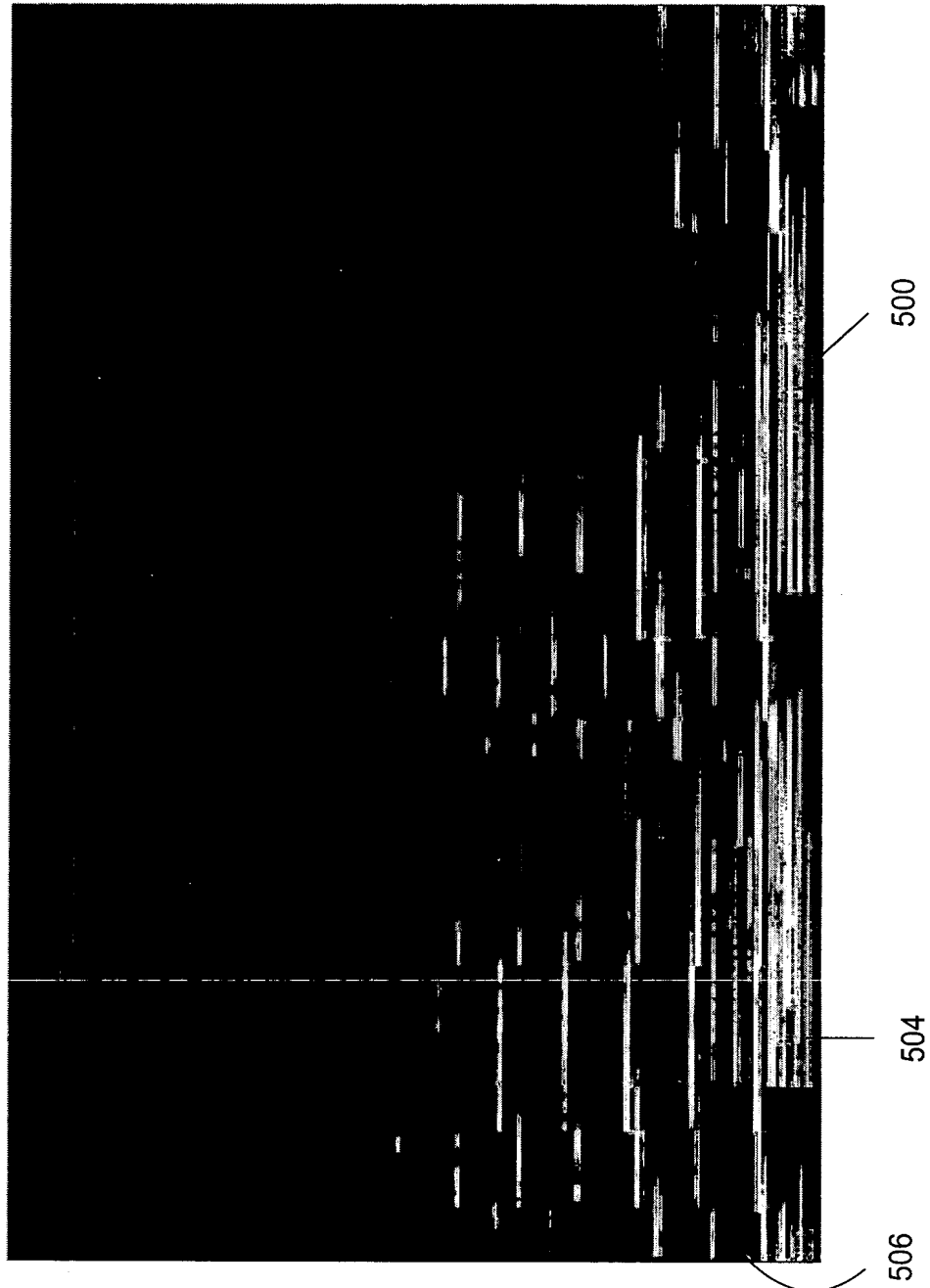
LABEL MUSIC PIECE AS FEMALE VOCAL SOLO — 340

END — 330

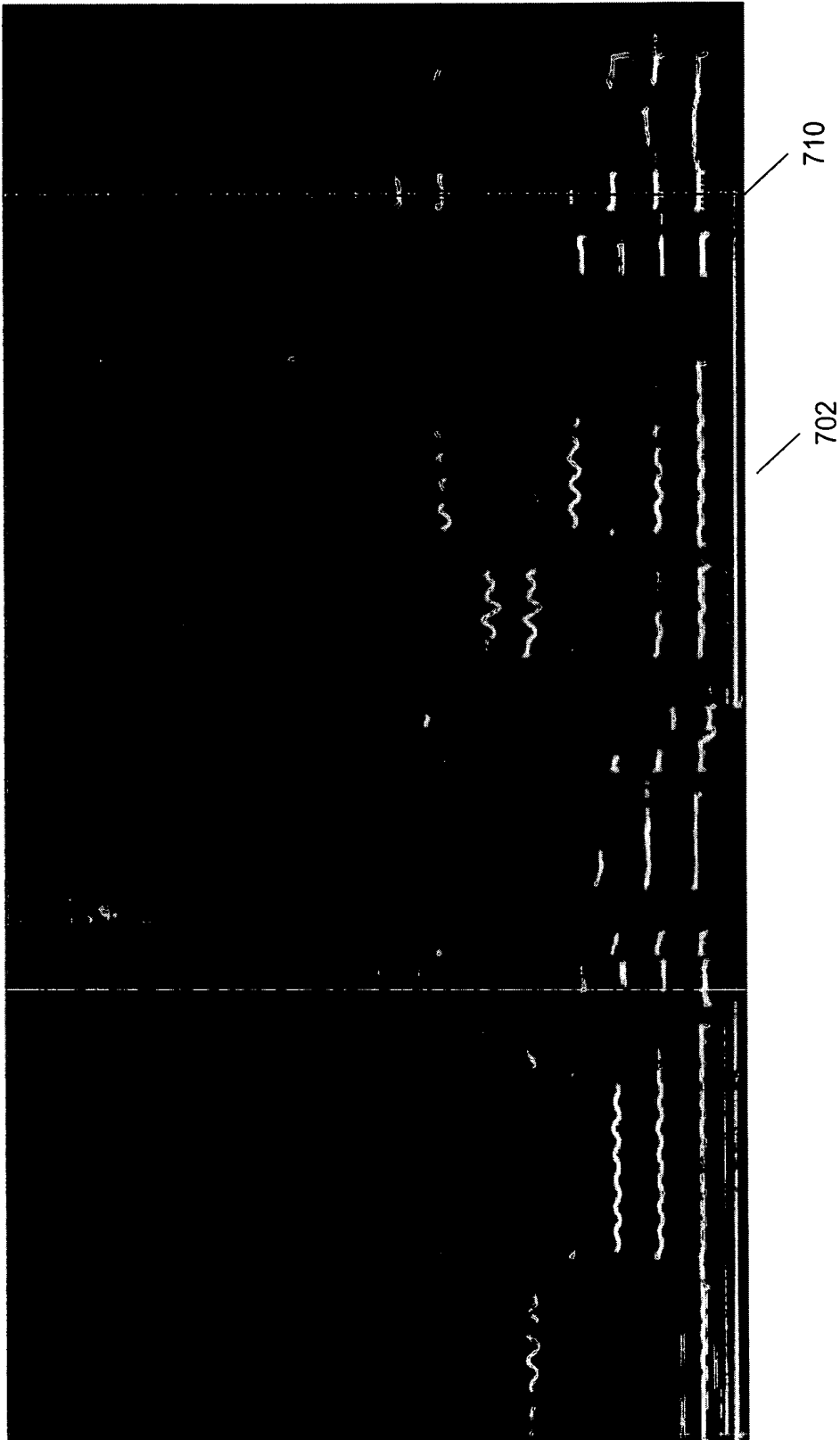FIGURE 3C

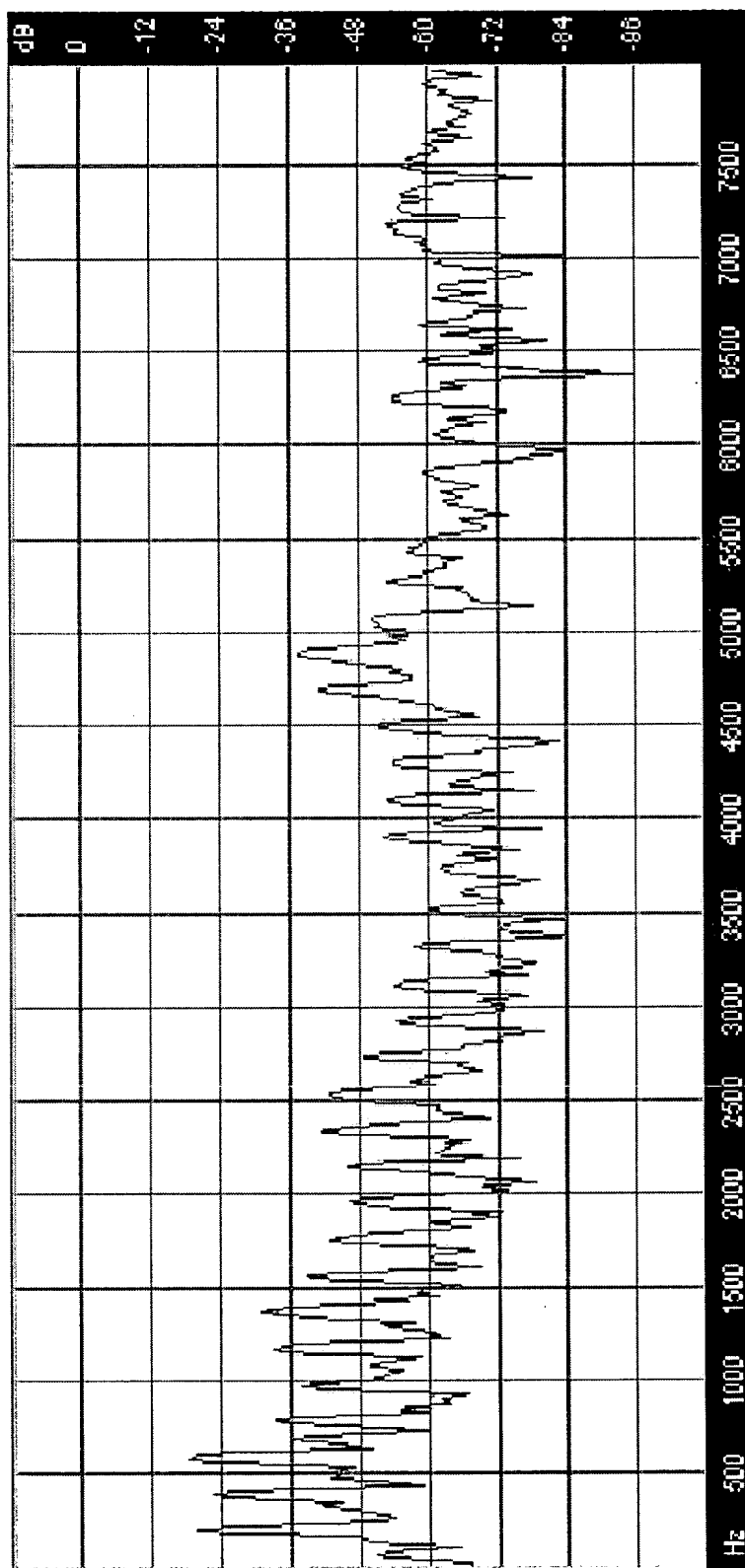FIGURE 4

FIGURE 5A
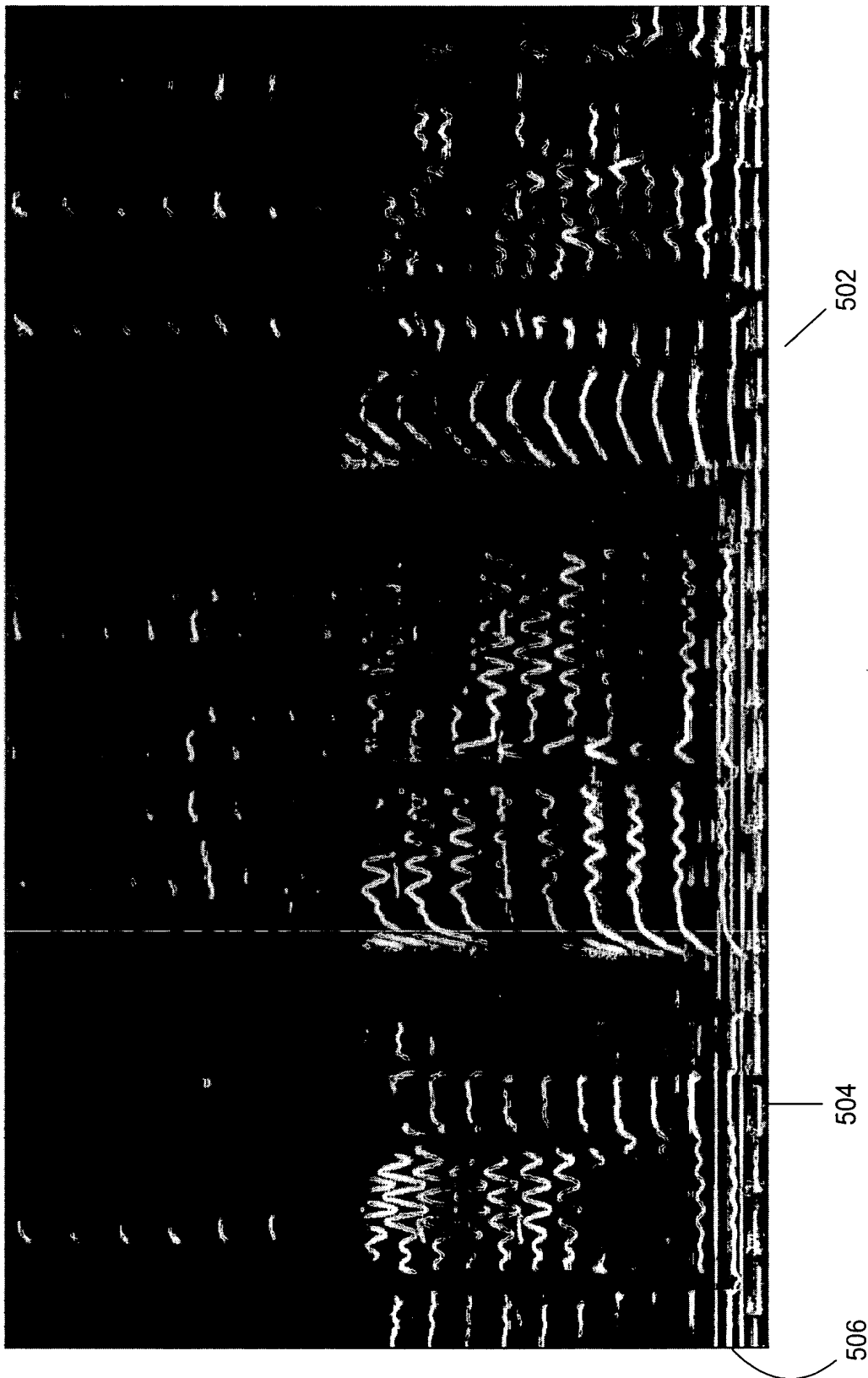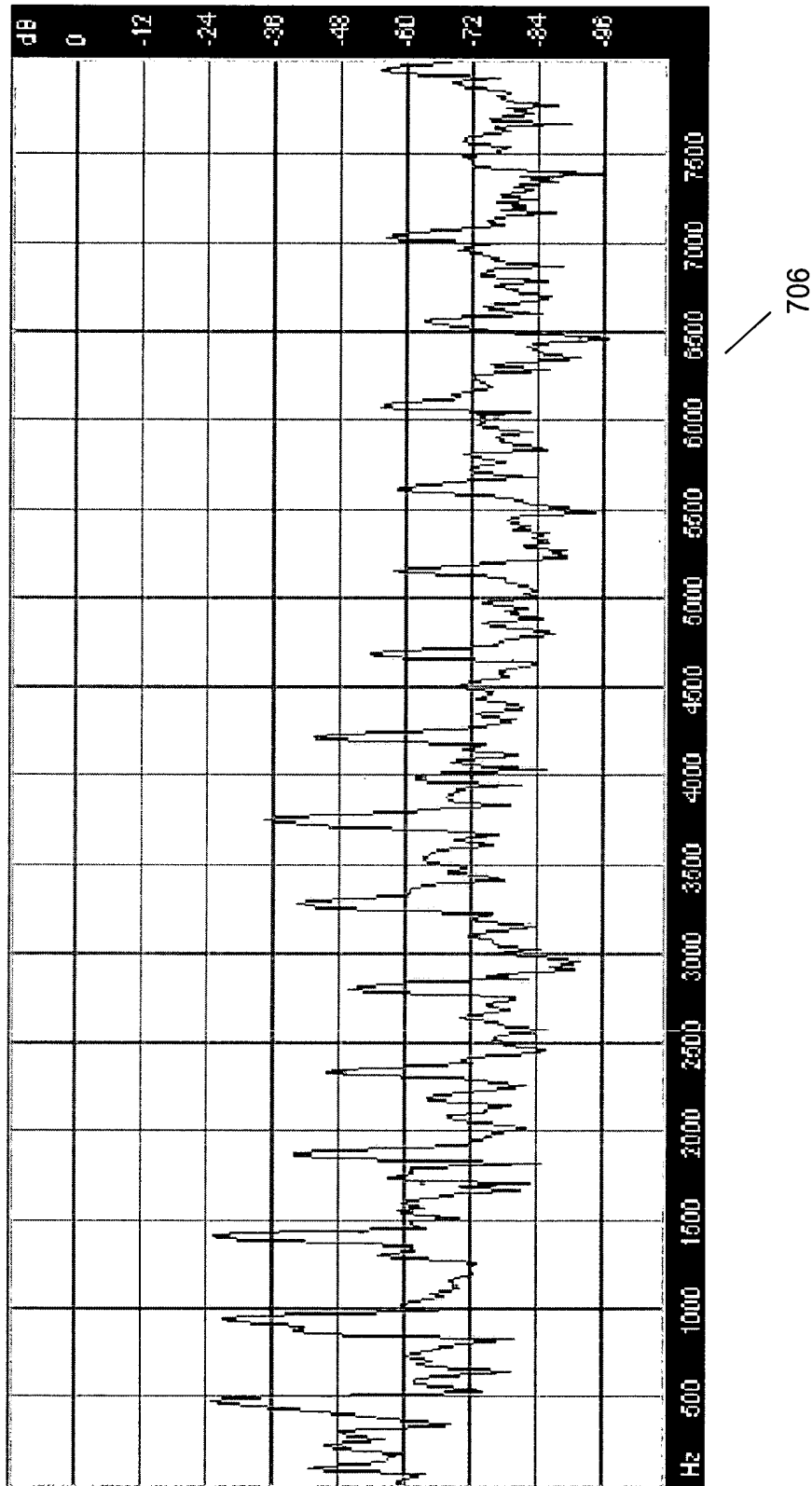
FIGURE 5B
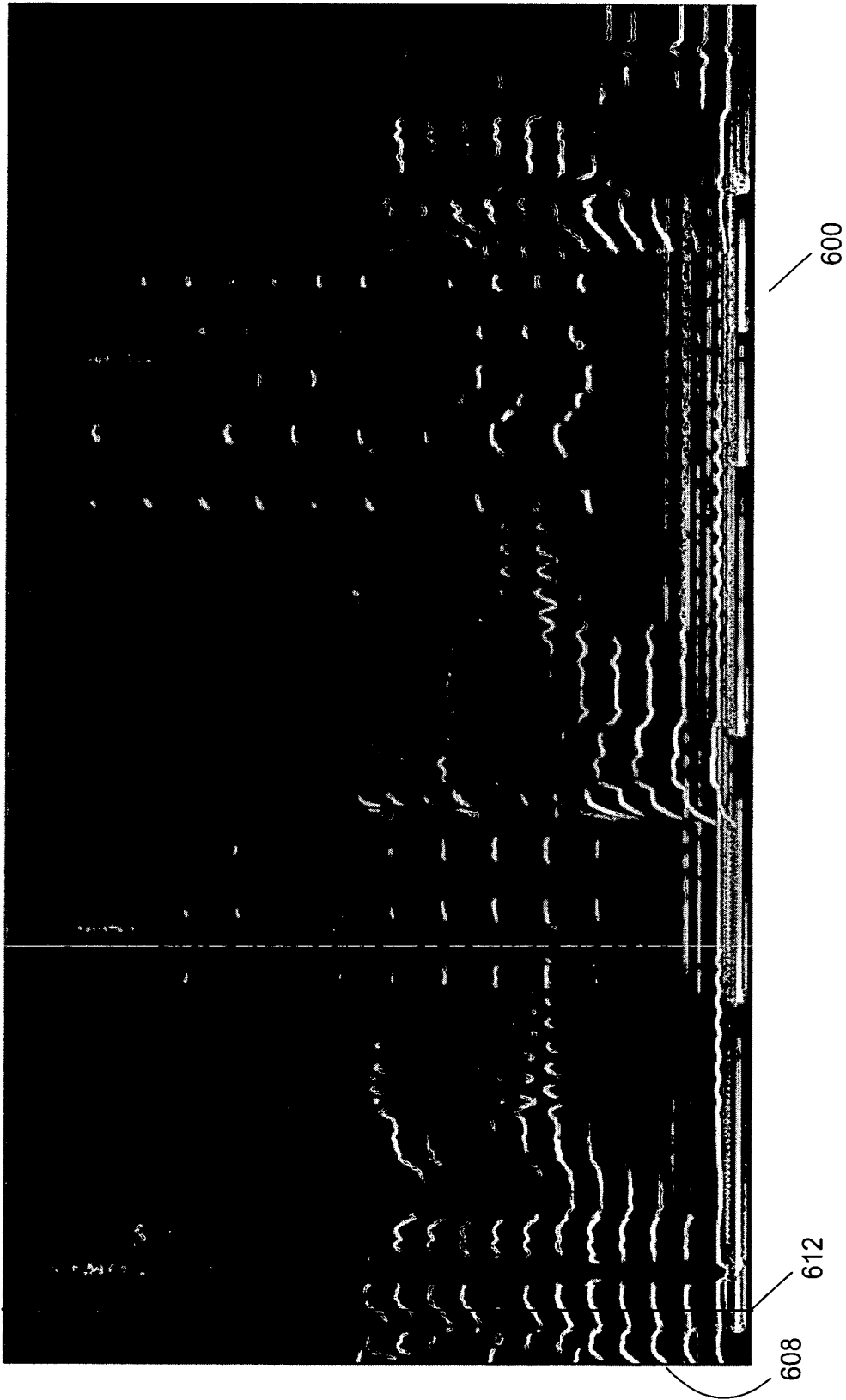
FIGURE 6A
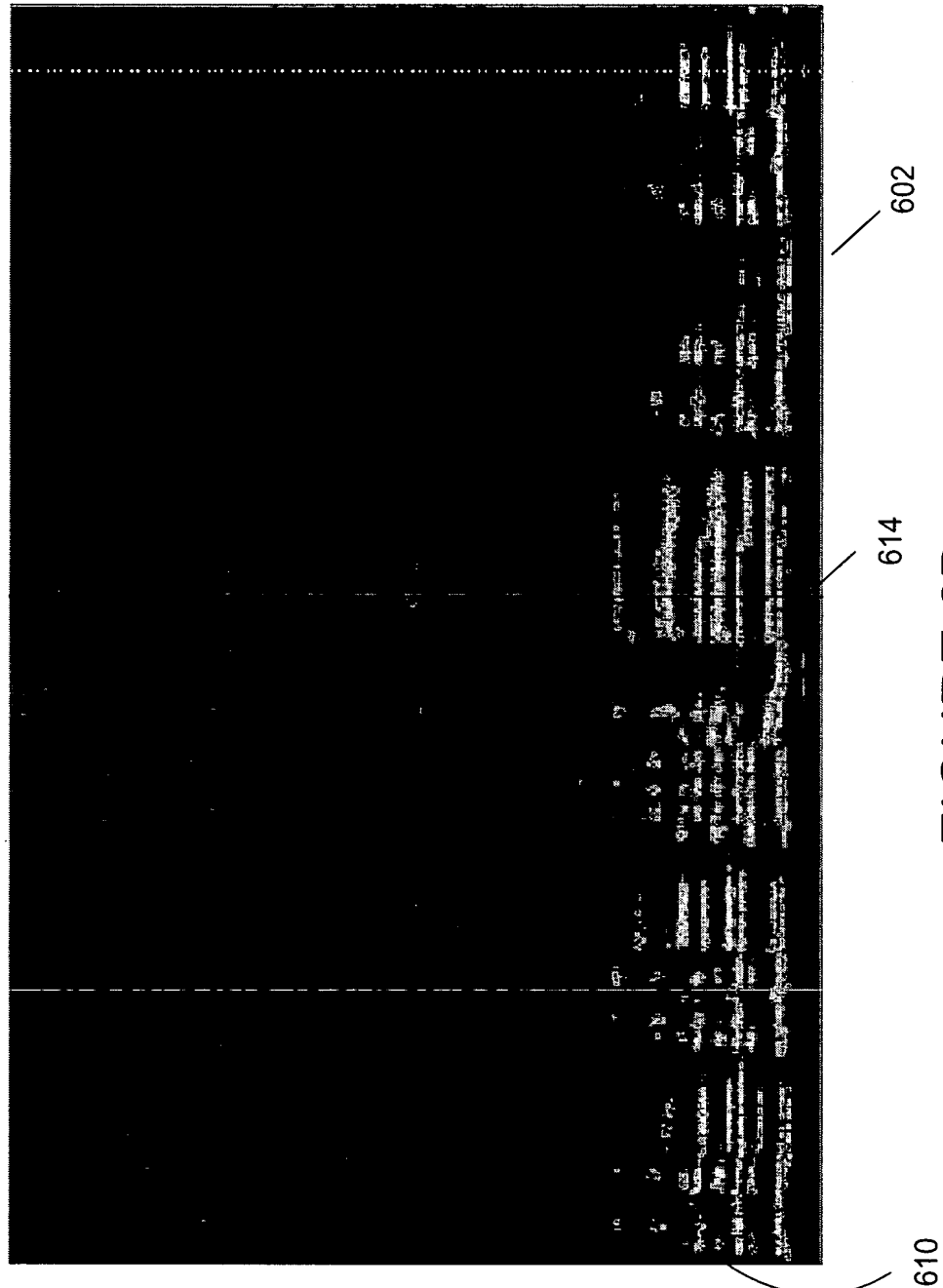
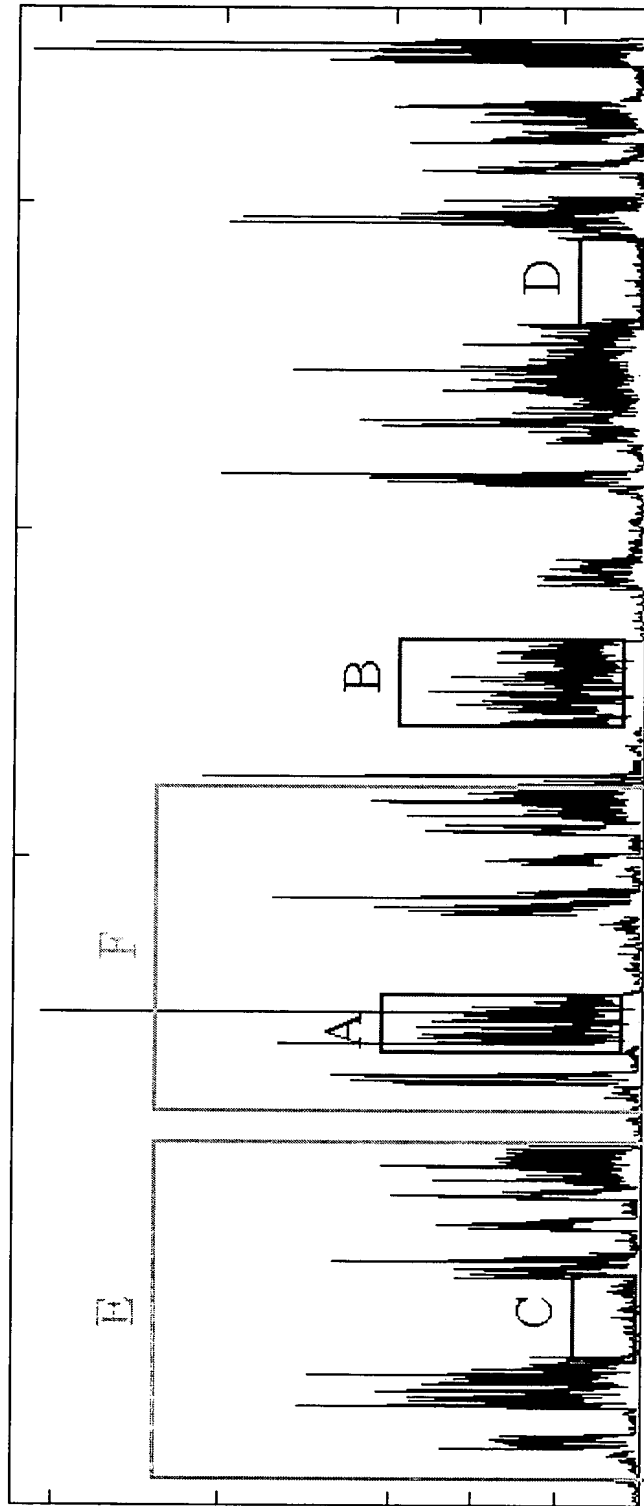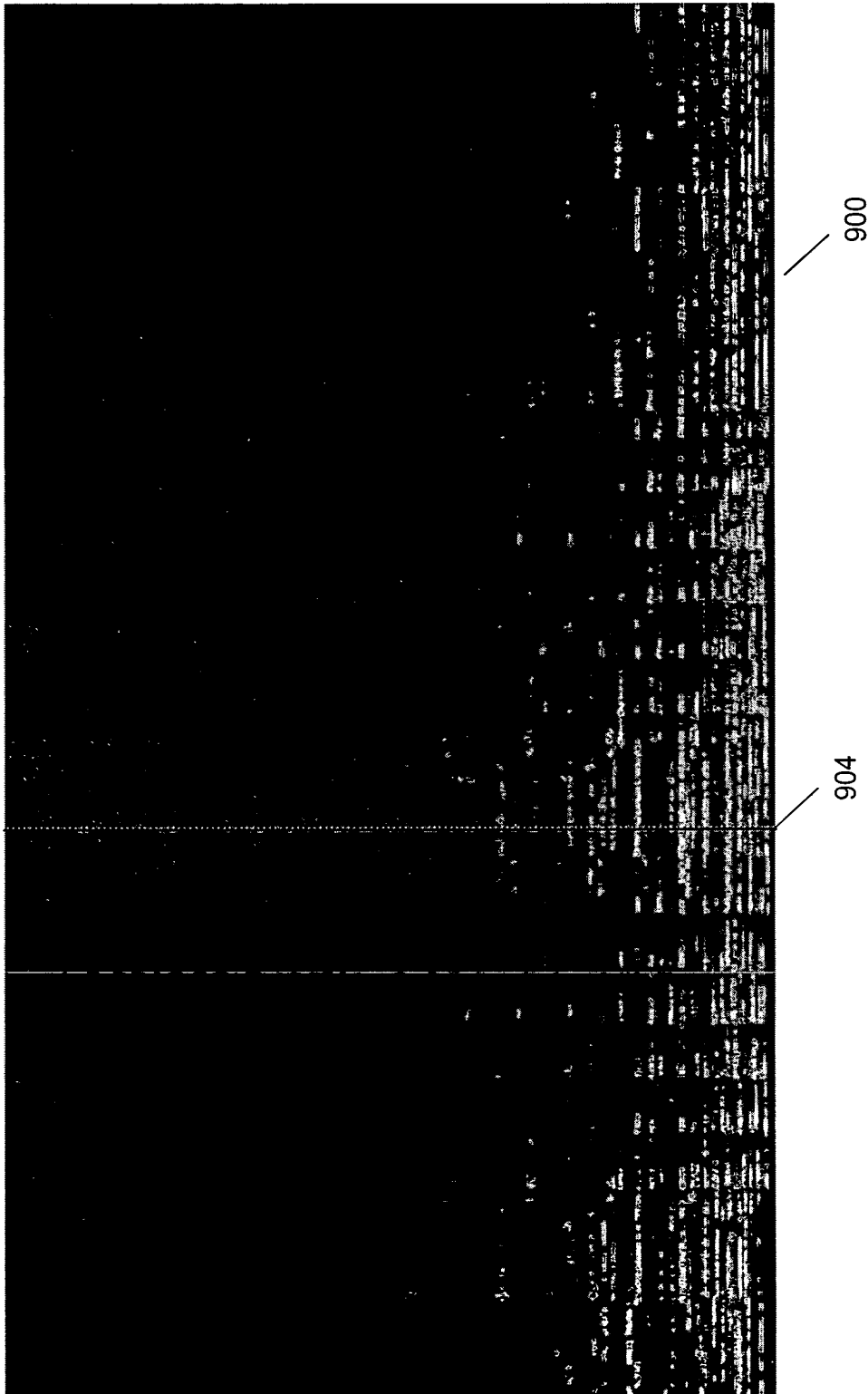FIGURE 6B
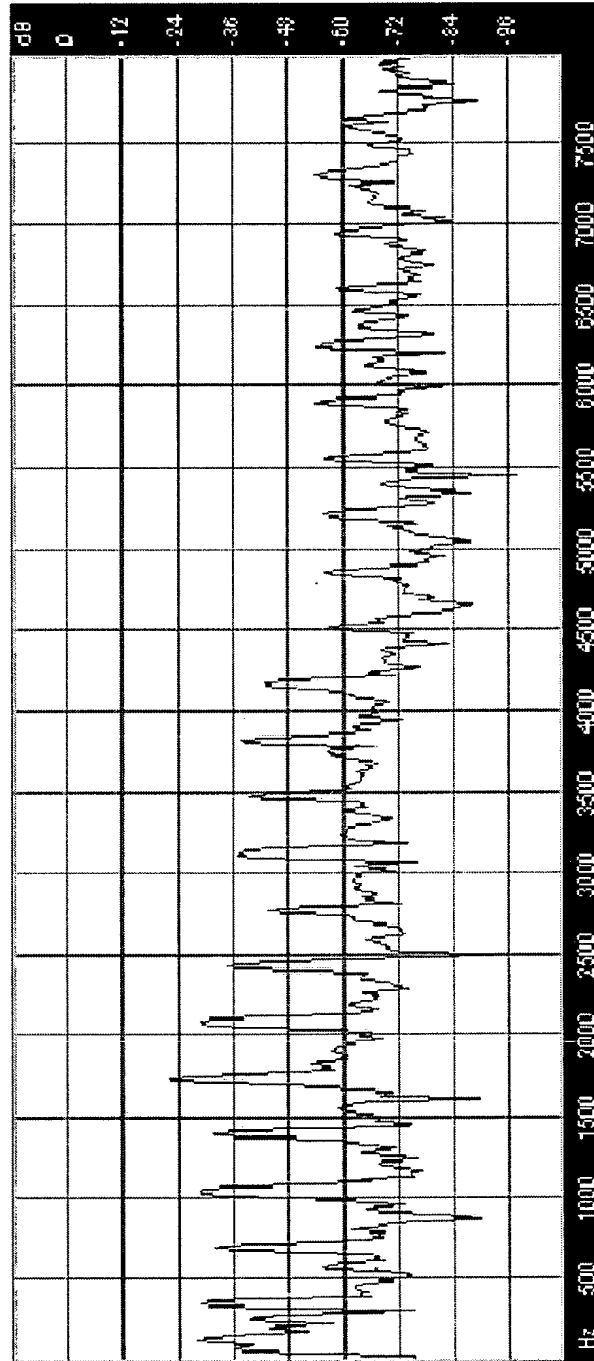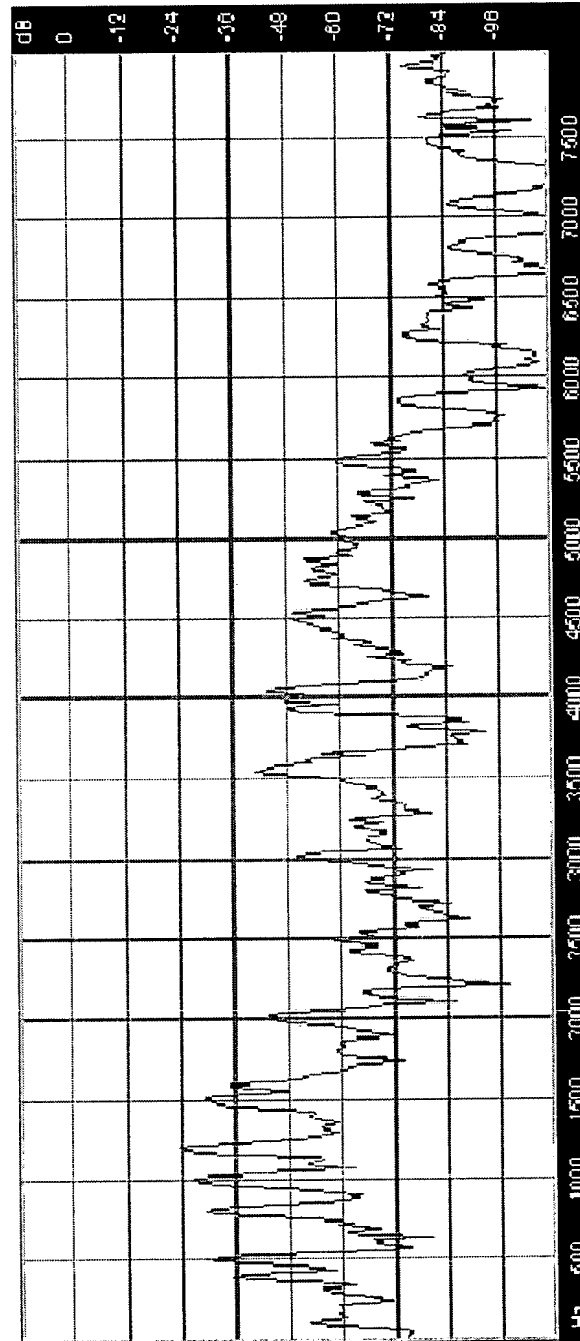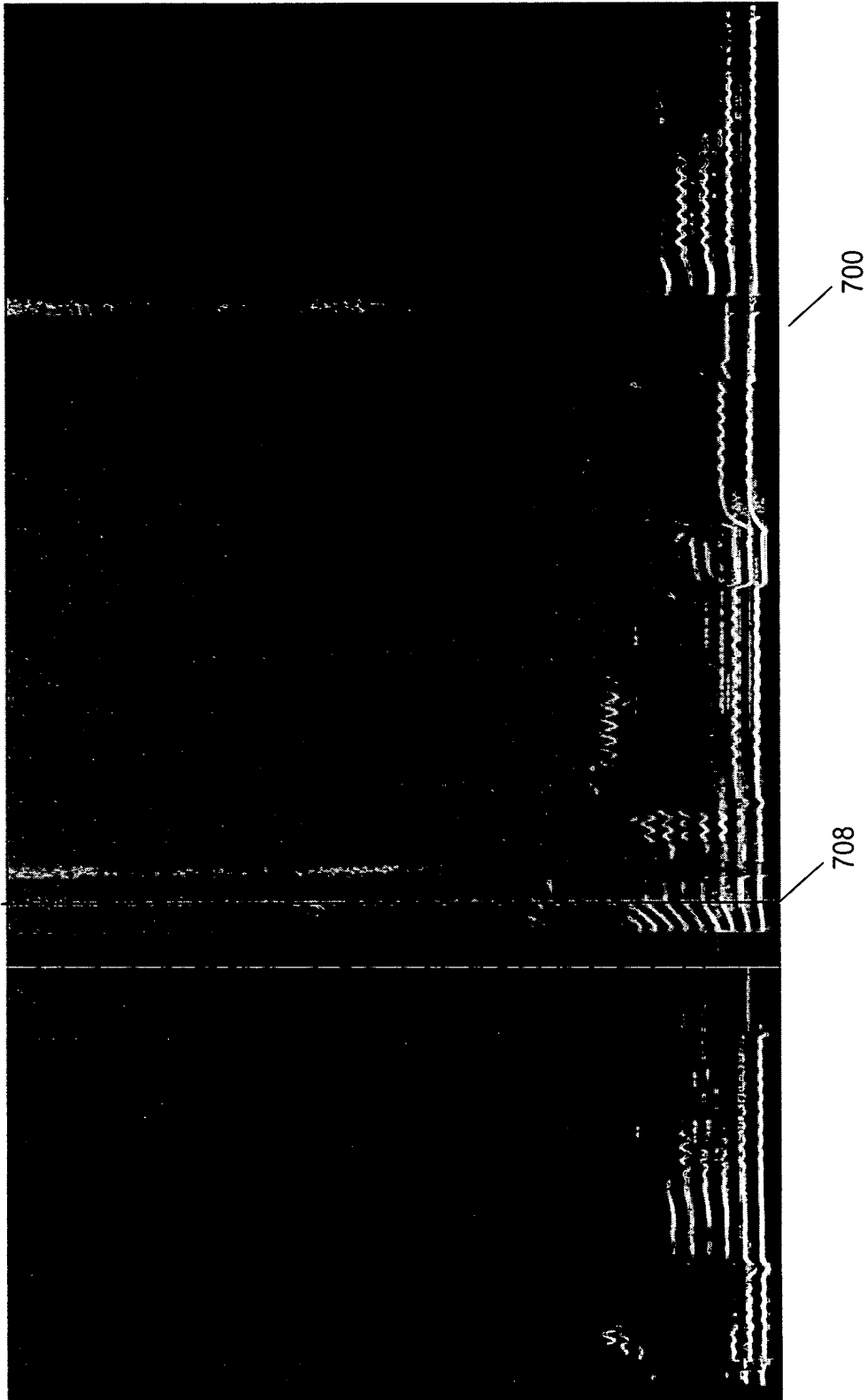
FIGURE 6C

FIGURE 6D

FIGURE 7A

FIGURE 7B

FIGURE 7C

FIGURE 7D

FIGURE 8

FIGURE 9A

FIGURE 9B

FIGURE 10